

Worksheet 4

2.3 Social costs and benefits

1. Match the economic terms and concepts with their explanations.

A Private cost

B Private benefit

C External cost

D External benefit

E Social cost

F Social benefit

G Profitable use of resources

H Economic use of resources

I Uneconomic use of resources

E

The total cost to society of an activity, including both its private and external costs

D

A benefit arising from an action that creates a positive externality, such as disease prevention due to vaccinations. It is enjoyed by other people or organizations not involved in the decision that created the benefit and at no cost to them

A

A financial cost, such as the purchase of a new computer or the loss of satisfaction, incurred by the person or firm responsible for the action or decision that caused it

I

An activity that reduces economic welfare because it generates a total social cost that exceeds its total social benefit

G

A productive activity that yields a total private benefit greater than its private costs

B

A financial benefit, such as sales revenue or a gain in satisfaction, enjoyed by the person or firm responsible for the action or decision that created it

F

The total benefit to society of an activity, including both its private benefits and external benefits

C

A cost arising from a negative externality, such as pollution, that is incurred by other people or organizations but not by those responsible for the action or decision that caused it

H

An activity that enhances economic welfare because it generates a total social benefit that exceeds its total social cost

2. Which of the following are private or external costs or benefits?

Cost or benefit	Private or external cost or benefit?
A consumer pays \$10 to watch a film at a cinema	Private cost (film provides private benefit)
The total monthly wage bill for a firm for its employees	Private cost
The payment of interest on a bank loan	Private benefit
A car breaks down on a busy road causing congestion	Congestion caused is an external cost
The payment of interest on a bank loan	Private cost
A leak from a nuclear power station contaminates local crops	Loss of crops is an external cost
The introduction of new late-night flights increases noise levels	Noise imposes an external cost
Business insurance premiums rise due to an increase in crime	Private cost caused by external cost of crime
Working days lost due to influenza among employees fall due to the introduction of free vaccinations	External benefit

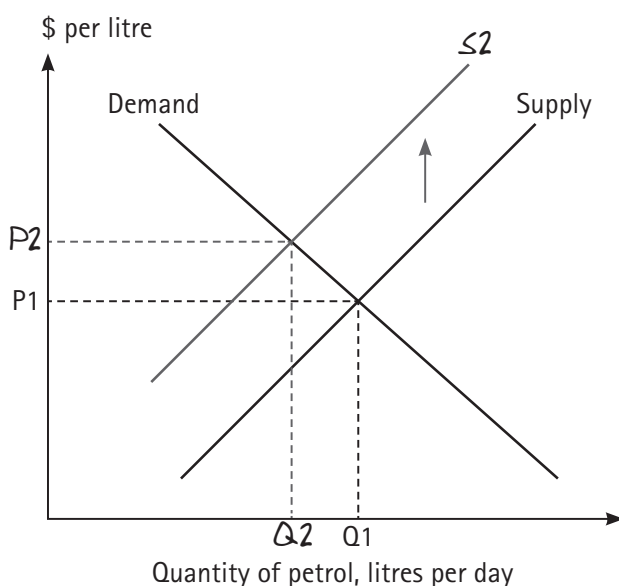
3. Look at the actions in the table below. Try to identify likely private and external costs and benefits in each case. Some suggestions have been included for the first action.

Action	Private costs	Private benefits	External costs	External benefits
A firm pays for private health care for all its workers	Increased labour costs	Increased output and revenues	May reduce resources available for public health care	Reduction in public health care costs
A truck carrying hazardous waste overturns and spills its cargo onto a major highway	Cost of running the truck	Payment received by the haulage company to transport waste	Congestion and possible health hazards	
A car manufacturer applies to build a new factory to produce tyres near a residential area	Cost of planning application and construction for the manufacturer	Possible savings in average costs if the factory is larger and more efficient	Dust and noise during building and operation of the plant; visual intrusion	New jobs created
A software company allows more of its employees to work flexibly from home	Possibly additional management costs; some loss of output	Office space savings; more productive workforce		Reduced congestion on roads from employees driving to work

4. The following diagrams show market demand and supply for petrol and electric vehicles.

- The government wants to discourage the use and production of petrol because it releases harmful emissions by introducing a new tax of \$1 per litre. Show the effect of this tax in the first diagram.
- The government also wishes to encourage the production and purchase of electric vehicles because they create less pollution than vehicles that run on petrol. It agrees to subsidize car manufacturers by paying them US\$1,000 for each electric car produced. Show the effect of the subsidy in the second diagram.

Market for petrol



Market for electric vehicles

